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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,008	03/15/2004	James A. Benjamin	01BAE96641	1597
22492	7590	07/27/2005	EXAMINER	
DAVID L. DAVIS, ESQ. 90 WASHINGTON VALLEY ROAD BEDMINSTER, NJ 07921			NGUYEN, HIEU P	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

(A)

<b>Office Action Summary</b>	<b>Application No.</b> 10/801,008	<b>Applicant(s)</b> BENJAMIN ET AL.	
	<b>Examiner</b> Hieu Nguyen	<b>Art Unit</b> 2817	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03/15/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 12 is/are allowed.
- 6) ☒ Claim(s) 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03/15/2004</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 1,3,6,7 objected to because of the following informalities:

Claim 1, line 5,8, "input" should correctly be --RF input--.

Claim 1, line 11,14, "carrier" should correctly be--reference carrier--.

Claim 1, line 8,14,20,21, "output" should correctly be--RF output--.

Claim 3, line 9, "output" should correctly be --RF output--.

Claim 3, line 12,17, " unmodulated carrier" should be--reference carrier--.

Claim 6, line 11, "amplifier" should correctly be --RF amplifier--.

Claim 7, line 7,17,22, "amplifier" should correctly be --RF amplifier--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by Gurvich et al. (US Pat. Pub. 2004/0160274).

Regarding claim 11, Fig. 9 of Gurvich suggests a method for providing a broadband linearized RF amplifier system comprising the steps of: amplifying via a power amplifier (215) an undistorted RF input signal (101), whereby the amplified RF output signal (output from 215) includes a modulated carrier with distortion products (output from 215) produced during amplification; removing the modulated carrier from the RF output signal to obtain a comparison signal (output from 315) containing only the distortion products; phase inverting by 180 degree the distortion products in the comparison signal (Para. [0008], line 19-21); dynamically adjusting the phase inverted distortion products (by using gain and phase adjusting network 325) to have the same amplitude as the distortion products in the amplified RF output signal; and summing the phase and amplitude adjusted distortion products (output from 400) with the amplified RF output signal to produce an RF output signal from said RF amplifier system that is substantially free of distortion products.

***Allowable Subject Matter***

Claim 1-10,12 would be allowable if amended to overcome the objections above.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 call for, among others, a structure of a broadband linearized RF amplifier comprising a "Beta Loop means for comparing said first and second reference signals to produce properly weighted, phase adjusted, and amplified distortion products, for summing with the distorted output signal from said power amplifier, to cancel the distortion products from the output signal".

Claim 12, call for, among others, a method for providing a broadband linearized RF amplifier comprising a power amplifier that "processing said first and second processed signals for producing a third processed signal containing phase adjusted distortion products for amplification by said error amplifier to cause said distortion products to be canceled from said second output signal".

***Conclusion***

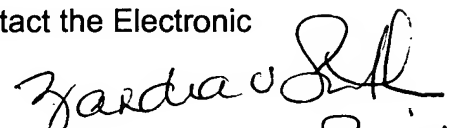
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references (see PTO-892) show further analogous prior art circuitry

These arts are deemed relevant and should be carefully reviews before any amendment is filed

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu Nguyen whose telephone number 571-272-0218. The examiner can normally be reached on 8:00 AM – 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Zandra V Smith  
Primary Examiner

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